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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/799,871

**Applicant(s)**

PINTSOV ET AL.

**Examiner**

DAVID P. RASHID

**Art Unit**

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

[1] All of the examiner's suggestions presented herein below have been assumed for examination purposes, unless otherwise noted.

#### ***Continued Examination Under 37 CFR 1.114***

[2] A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 11, 2008 has been entered.

#### ***Amendments***

[3] This office action is responsive to the Claim and specification amendment received on March 11, 2008. Claims 1-22 remain pending.

#### ***Claim Objections***

[4] In response to applicant's Claim objections amendments and remarks received on March 11, 2008, the previous Claim objections are withdrawn.

#### ***Claim Rejections - 35 USC § 112***

[5] The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

[6] Claims 16-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is

most nearly connected, to make and/or use the invention. Claims 16-22 cite "computer usable medium" but it is unclear according to the original disclosure whether a "computer usable medium" is a computer, software, etc. If a "computer usable medium" supports non-statutory subject matter (e.g. carrier wave, program, software), then Claims 16-22 are again non-statutory under 35 U.S.C. 101.

***Claim Rejections - 35 USC § 102***

[7] The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

[8] **Claims 1 and 9** are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,097,834 (filed Jun. 13, 1997) (issued Aug. 1, 2000) [*hereinafter* "Krouse"].

[i] Regarding **claim 1**, Krouse discloses a method (fig. 1) of automatically selecting document templates ("different respective formats" at 4:18-39), comprising the steps of:

presenting a document image (fig. 6, item 110; "document 400" at 14:64-16:2) from an account ("account" at 2:63-3:25);

matching ("match" at 14:64-16:2) the document image (fig. 6, item 110; "document 400" at 14:64-16:2) against a series of known document templates ("different respective formats" at 4:18-39 in "archive" item 228) from the account ("account" at 2:63-3:25), each

document template including information about a unique layout of a particular document image ("the particular document format utilized is unique to the party generating the document" (*emphasis added*) at 2:63-3:25; "Abscissa and Ordinate Displacements", "Length Difference", and "Width Difference" in "TABLE" at 16:5-29; "reference billing documents having their own respective formats" at 14:24-26) to allow that particular document to be identified ("[p]rocessor 220 compares the recognition characteristics of the particular document 400 being processing with the sets of reference recognition characteristics stored in the archive 228. . ." at 14:64-67) and information in that particular document to be identified and read (the information in document 400 is "identified and read" at 14:64-16:2);

producing confidence scores ("processor 220 'scores' the degree of best fit match condition. . .this scoring is made according to the scheme described in the following Table [at 16:5-29]" at 15:59-16:2) corresponding to the degree of similarity of the document image compared to each document template ("different respective formats" at 4:18-39); and

searching a document ( "check" at 7:32-53; "bill document" at 16:43-59) for distinctive features ("recognition characteristics from the scanned image" at 4:18-39; "standardized portion" at 7:32-53) and matching the document to an appropriate template ("based upon the one respective format when the particular format is determined to match the one respective format" at 4:18-39 wherein the template is the "one respective format"); and

using the appropriate template to identify a location on the document to look for information that is desired during document processing (16:43-59 wherein item 218 takes

the information from the reference billing document matched and “[g]enerator 218 then uses this information to determine the location and parsing of the fields in the OCR line of the scanned image. . .to apply to the particular OCR field location of the scanned image. . .”; “determining, based upon the one respective format. . .location of a field in the scanned image to which optical character recognition (OCR) may be applied to generate the transaction-related information” at 4:18-39).

- [ii] Regarding **Claim 9**, Claim 9 recites identical features as in Claim 1. Thus, arguments equivalent to that presented above for Claim 1 are equally applicable to Claim 9.

***Claim Rejections - 35 USC § 103***

- [9] The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- [10] **Claims 2-8, 10-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Krouse* in view of U.S. Patent No. 5,668,897 (filed Jun. 9, 1995) (issued Sep. 16, 1997) [*hereinafter* “*Stolfo*”].

- [i] Regarding **Claims 2 and 3**, while *Krouse* discloses the method of Claim 1, *Krouse* does not further comprise (i) the step of matching the confidence scores with a predetermined high similarity threshold, and (ii) the step of positively identifying the document image if a confidence score is above the predetermined high similarity threshold. *Stolfo* teaches comprising a step of matching the confidence scores with a predetermined high similarity threshold (referring to fig. 6, the check image undergoes the

step of searching a database (106) in search for either a complete match (108), a match within tolerance (112), or a match of any combination of patterns (118). “The input image is deemed to be a match whenever the distance is less than a preestablished threshold ( $\lambda$ ).”, 3:28. It can be inferred that a high similarity threshold is when the calculated distance is less than (considered “above” when negating) a pre-established  $\lambda$  (step 108 or 112)).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the method of *Krouse* to include further comprising (i) the step of matching the confidence scores with a predetermined high similarity threshold, and (ii) the step of positively identifying the document image if a confidence score is above the predetermined high similarity threshold as taught by *Stolfo* so that “to provide a method for identifying duplicate records in a database of financial document images, each record having at least one field and a plurality of keys” at 11:47-50 and “to provide variable-size or scaled check images retained on storage media, including decompression by utilizing codebook code to render full color and faithful reproductions of archived check images” at 11:42-46.

[ii] Regarding **Claim 4**, while *Krouse* discloses the method of Claim 1, *Krouse* does not disclose further comprising the step of matching the confidence score with a predetermined low similarity threshold.

*Stolfo* teaches comprises the step of matching the confidence score with a predetermined low similarity threshold (The high similarity threshold as disclosed in *Stolfo* can also constitute a low similarity threshold also if any calculated  $\lambda$  value is greater

than (considered “below” when negating) a pre-established  $\lambda$  as discussed above (step 118)).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the method of *Krouse* to include further comprising the step of matching the confidence score with a predetermined low similarity threshold as taught by *Stolfo* so that “to provide a method for identifying duplicate records in a database of financial document images, each record having at least one field and a plurality of keys” at 11:47-50 and “to provide variable-size or scaled check images retained on storage media, including decompression by utilizing codebook code to render full color and faithful reproductions of archived check images” at 11:42-46.

[iii] Regarding **Claim 5**, while *Krouse* in view of *Stolfo* discloses the method of Claim 4, *Krouse* in view of *Stolfo* does not disclose further comprising the step of creating a new document template for the account corresponding to the document image if the confidence score is below the predetermined low similarity threshold.

*Stolfo* teaches comprising the step of creating a new document template for the account corresponding to the document image if the confidence score is below the predetermined low similarity threshold (fig. 6, reference numeral 124 shows that a background of the check image below the pre-established  $\lambda$  value is compressed. In addition, “It is another object of the present invention to provide variable-size or scaled check images retained on storage media, including decompression by utilizing codebook code to render full color and faithful reproductions of archived check images.”, column 11:42, and thus it can be inferred that if the check image in question has been compressed



into the memory for future decompression when exerting the algorithm, a new document template for the account has been produced.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the method of *Krouse* in view of *Stolfo* to further comprise the step of creating a new document template for the account corresponding to the document image if the confidence score is below the predetermined low similarity threshold as taught by *Stolfo* so that “to provide a method for identifying duplicate records in a database of financial document images, each record having at least one field and a plurality of keys” at 11:47-50 and “to provide variable-size or scaled check images retained on storage media, including decompression by utilizing codebook code to render full color and faithful reproductions of archived check images” at 11:42-46.

[iv] Regarding **Claim 6**, while *Krouse* in view of *Stolfo* discloses the method of Claim 4, *Krouse* in view of *Stolfo* does not disclose further comprising the step of applying a partial layout comparison to the image and the closest matching template if the confidence score is above the low similarity threshold.

*Stolfo* teaches further comprising the step of applying a partial layout comparison to the image and the closest matching template if the confidence score is above the low similarity threshold (Other than the background pattern template comparison as discussed above, fig. 4 shows a signature comparison as well. Because of these two separate databases and comparisons, the background pattern template comparison (having fig. 6 in more detail) can be considered a partial layout comparison of the check as a whole. It has already been discussed above that if the confidence score and the low similarity threshold is

equivalent to the high similarity threshold (Case 1), being above the low similarity threshold is equivalent to the high similarity threshold range as already discussed in Claim 3.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the method of *Krouse* in view of *Stolfo* to further comprise the step of applying a partial layout comparison to the image and the closest matching template if the confidence score is above the low similarity threshold as taught by *Stolfo* so that “to provide a method for identifying duplicate records in a database of financial document images, each record having at least one field and a plurality of keys” at 11:47-50 and “to provide variable-size or scaled check images retained on storage media, including decompression by utilizing codebook code to render full color and faithful reproductions of archived check images” at 11:42-46.

[v] Regarding **Claim 7**, while *Krouse* in view of *Stolfo* discloses the method of Claim 6, *Krouse* in view of *Stolfo* do not disclose further comprises the step of providing results of the partial layout comparison including a list of image parts and a corresponding confidence score for each image part.

*Stolfo* teaches further comprising the step of providing results of the partial layout comparison including a list of image parts and a corresponding confidence score for each image part (Other than the background pattern template comparison as discussed above, fig. 4 shows a signature comparison as well. “In one embodiment according to the present invention, the payor's signature on the check 50 is verified for authenticity by comparing it with a database of signatures 84 including a representation of the signature of the drawer. If the signature does not match a corresponding signature in the database 86, the bank operator

needs to be informed for manual verification and the possibility of a possible fraudulent check 88.”, column 26:66. It is inherent that comparing a signature to signatures in a database requires some threshold or confidence score.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the method of *Krouse* in view of *Stolfo* to further comprise the step of providing results of the partial layout comparison including a list of image parts and a corresponding confidence score for each image part as taught by *Stolfo* so that “to provide a method for identifying duplicate records in a database of financial document images, each record having at least one field and a plurality of keys” at 11:47-50 and “to provide variable-size or scaled check images retained on storage media, including decompression by utilizing codebook code to render full color and faithful reproductions of archived check images” at 11:42-46.

[vi] Regarding **Claim 8**, while *Krouse* in view of *Stolfo* discloses the method of Claim 7, *Krouse* in view of *Stolfo* do not disclose further comprising the step of creating one or more exclusion zones corresponding to image parts that exhibit a low confidence score.

*Stolfo* further comprises the step of creating one or more exclusion zones corresponding to image parts that exhibit a low confidence score (fig. 4, items 88, 66, 94 such that “exclusion zones” are those actions taken if the image part of the check does not match within a pre-established threshold for questioning the authenticity of the check, as the checks are “excluded” from further processing).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the method of *Krouse* in view of *Stolfo* to further comprise the step

of creating one or more exclusion zones corresponding to image parts that exhibit a low confidence as taught by *Stolfo* so that “to provide a method for identifying duplicate records in a database of financial document images, each record having at least one field and a plurality of keys” at 11:47-50 and “to provide variable-size or scaled check images retained on storage media, including decompression by utilizing codebook code to render full color and faithful reproductions of archived check images” at 11:42-46.

[vii]           Regarding **Claim 10**, Claim 10 recites identical features as in Claims 1, 2, 4, and 9. Thus, arguments equivalent to that presented above for Claims 1, 2, 4 and 9 are equally applicable to Claim 10.

[viii]           Regarding **Claim 11**, Claim 11 recites identical features as in Claim 3. Thus, arguments equivalent to that presented above for Claim 3 is equally applicable to Claim 11.

[ix]           Regarding **Claim 12**, Claim 12 recites identical features as in Claim 5. Thus, arguments equivalent to that presented above for Claim 5 is equally applicable to Claim 12.

[x]           Regarding **Claim 13**, Claim 13 recites identical features as in Claim 6. Thus, arguments equivalent to that presented above for Claim 6 is equally applicable to Claim 13.

[xi]           Regarding **Claim 14**, Claim 14 recites identical features as in Claim 7. Thus, arguments equivalent to that presented above for Claim 7 is equally applicable to Claim 14.

[xii]           Regarding **Claim 15**, Claim 15 recites identical features as in Claim 8. Thus, arguments equivalent to that presented above for Claim 8 is equally applicable to Claim 15.

[xiii]           Regarding **Claims 16 and 22**, Claims 16 and 22 recites identical features as in Claims 1, 2, 4 and 9. Thus, arguments equivalent to that presented above for Claims 1, 2, 4 and 9 are equally applicable to Claims 16 and 22 in addition to performing the method using

a computer program and machine readable instructions as disclosed: item 40 of fig. 2, *Krouse*.

[xiv] Regarding **Claim 17**, Claim 17 recites identical features as in Claim 3. Thus, arguments equivalent to that presented above for Claim 3 is equally applicable to Claim 17.

[xv] Regarding **Claim 18**, Claim 18 recites identical features as in Claim 5. Thus, arguments equivalent to that presented above for Claim 5 is equally applicable to Claim 18.

[xvi] Regarding **Claim 19**, while *Krouse* in view of *Stolfo* discloses the computer program of Claim 16, *Krouse* in view of *Stolfo* do not disclose further comprising machine readable instructions for applying a partial layout comparison to the document image and the closest matching document template if the confidence score is above the low similarity threshold and below the high similarity threshold.

*Stolfo* teaches comprising machine readable instructions for applying a partial layout comparison to the document image and the closest matching document template if the confidence score is above the low similarity threshold and below the high similarity threshold (fig. 6 again shows the background portion of the check being compared to database templates (partial layout comparison) for both the low and high similarity threshold comparisons against the confidence score. Arguments equivalent to that presented above for Claims 3 and 5 is equally applicable to Claim 19 since the low and high similarity threshold comparisons are equivalent in Case 1.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the method of *Krouse* in view of *Stolfo* to further comprise machine readable instructions for applying a partial layout comparison to the document image and

the closest matching document template if the confidence score is above the low similarity threshold and below the high similarity threshold as taught by *Stolfo* so that “to provide a method for identifying duplicate records in a database of financial document images, each record having at least one field and a plurality of keys” at 11:47-50 and “to provide variable-size or scaled check images retained on storage media, including decompression by utilizing codebook code to render full color and faithful reproductions of archived check images” at 11:42-46.

[xvii] Regarding **Claim 20**, Claim 20 recites identical features as in Claim 7. Thus, arguments equivalent to that presented above for Claim 7 is equally applicable to Claim 20.

[xviii] Regarding **Claim 21**, Claim 21 recites identical features as in Claim 8. Thus, arguments equivalent to that presented above for Claim 8 is equally applicable to Claim 21.

#### ***Response to Arguments***

[12] Applicant’s arguments filed on March 11, 2008 with respect to Claims 1, 8, 10, 15-16, and 21 have been respectfully and fully considered, but are not found persuasive.

[13] Summary of Remarks regarding Claims 1, 10, and 16:

*Stolfo* fails to teach that each record contains information about a unique layout to allow the document itself to be identified and information in that particular document to be identified and read. The “collection of identifiers” in the *Stolfo* records only distinguishes the records from each other (*Id.*), and has no role in identifying a particular document or allowing information in a particular document to be identified and read. Although *Stolfo* teaches that information, such as a signature from a document/check, may be identified (see, e.g., column 26, lines 57-66; column 27-5), the records of *Stolfo* themselves do not include information about a unique layout to allow

information in a particular document to be identified and read, as would be required by claims 1, 10, and 16. Rather, *Stolfo* teaches that the information is obtained from the remainder after the records are used to subtract the document background away. (*Id.*)

Furthermore, as stated by the Examiner on page 5 and page 12 of the Action, *Stolfo* fails to teach that the appropriate template is used to identify a location on the record to look for information that is desired during document processing, as required by amended claim 1. *Stolfo*, on the other hand, simply teaches a "template" that allows substantial compression by representing the background as merely a simple identifying code. (See *Stolfo*, column 7, lines 52-54).

*Krouse* fails to cure the deficiency in *Stolfo*. *Krouse* concerns financial transaction. respective formats (emphasis added). These "other transaction documents" are not predefined document templates or a series of known templates but, rather, previous transaction documents that have already been analyzed by the system. This is not the same as the appropriate template as described by the current application. Particularly, the "other transaction documents" does not comprise a "number of predefined document templates (those being documents in circulation in a particular institution and only those)" (see page 3 of current application). Accordingly, claim 1 is patentable over *Stolfo* in view of *Krouse*.

**[14]** Examiner's Response regarding Claims 1, 10, and 16:

Applicant's arguments with respect to Claims 1, 10, and 16 have been considered but are moot in view of the new grounds of rejection.

**[15]** Summary of Remarks regarding Claims 8, 15, and 21:

Applicant argues that the Examiner broadly interprets an exclusion zone as covering any action taken if the image part of the check does not match with a pre-established threshold. The

present invention's description of exclusion zone, however, is distinctly defined differently in claims 7, 14, and 20, from which claims 8, 15, and 21 respectively depend. Specifically, claims 7, 14, and 20 recite that the comparison is a partial layout comparison of the image parts and not a comparison of the entire image as a whole. Only the image parts and not the entire image is excluded from further processing if that image part has a relatively small zone of low-confidence matching. (*See, e.g.*, present application ¶161.)

Such image parts are labeled as an exclusion zone and would be excluded from future image feature comparisons. Consequently, *Stolfo* fails to teach the creation of one or more exclusion zones corresponding to image parts that exhibit a low confidence score. Accordingly, claims 8, 15, and 21 are also patentable over *Stolfo* and *Krouse*, viewed alone or in combination.

**[16] Examiner's Response regarding Claims 8, 15, and 21:**

Though the applicant's interpretation of "exclusion zone" is different from that of the examiner's, Claims 8, 15, and 21 have shown they can be read broadly enough to encompass both interpretations. The examiner has interpreted an exclusion zone that to be when the check is "excluded" from further processing due to the presence of potential fraudulent activity within the check document image, on the onset of a low confidence score (0% match or "No" to the answers within fig. 4). This situation may arise on multiple occasions (or "zones") within the method of *Stolfo*, including identifying code, signature, and date matching.

***Conclusion***

**[17]** The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 5216724 A; US 5237620 A; US 5430644 A; US 5433483 A; US 5448471 A; US 5524063 A; US 5563955 A; US 5659469 A; US 5677955 A; US 5748780 A.



[18] Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID P. RASHID whose telephone number is (571)270-1578. The examiner can normally be reached Monday - Friday 7:30 - 17:00 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on (571) 272-74155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David P. Rashid/  
Examiner, Art Unit 2624

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Examiner  
Art Unit 26244

/Vikkram Bali/  
Supervisory Patent Examiner, Art Unit 2624